

WE CLAIM:

- 1 1. A method for maintaining a unique session ID in a network, comprising:
 - 2 creating a unique session identifier; and
 - 3 providing the unique session identifier to a software module that provides for performing
 - 4 authentication.
- 1 2. The method recited in Claim 1, wherein:
 - 2 creating a unique session identifier further comprises appending a unique identifier
 - 3 associated with an access server to a local session identifier.
- 1 3. The method recited in Claim 2, wherein:
 - 2 the unique identifier is an IP address.
- 1 4. The method recited in Claim 1, further comprising:
 - 2 providing the unique session identifier to an off-load server.
- 1 5. The method recited in Claim 1, wherein:
 - 2 creating a unique session identifier further comprises creating a unique session identifier
 - 3 for each of a plurality of network access servers.
- 1 6. A system, comprising:
 - 2 a network access server, the network access server being associated with a corresponding
 - 3 unique identifier;
 - 4 wherein the network access server is configured to generate a corresponding local session
 - 5 identifier; and
 - 6 wherein the network server is further configured to generate a corresponding unique
 - 7 session identifier.
- 1 7. The system recited in Claim 6, wherein:
 - 2 the unique identifier is an IP address.
- 1 8. The system recited in Claim 6, wherein:

the network access server is one of a plurality of network access servers;
each of the plurality of network access servers is configured to generate a corresponding
local session identifier; and
each of the plurality of network servers is further configured to generate a corresponding
unique session identifier.

9. The system recited in Claim 6, further comprising:

an off-load server, the off-load server being coupled to receive the corresponding unique
session identifier from the network access server.

10. The system recited in Claim 9, wherein:

the off-load server is configured to provide the corresponding unique session identifier to
a software module that is configured to perform accounting processing.

11. The system recited in Claim 9, wherein:

the off-load server is configured to provide the corresponding unique session identifier to
a software module that is configured to perform port counting.

12. The system recited in Claim 6, further comprising:

a software module that is configured to perform authentication, the software module
being further configured to receive the corresponding unique session identifier
from the network access server.

13. The system recited in Claim 6, wherein:

the network access server is further configured to generate the corresponding unique
session identifier by appending the unique IP address with the local session
identifier.

14. The system recited in Claim 9, wherein:

the off-load server is further configured to generate a start record, the off-load server
being further configured to associate the start record with the corresponding
unique session identifier; and

the off-load server is further configured to provide the start record to a software module that provides for performing accounting processing.

15. The system recited in Claim 9, further wherein:

the off-load server is further configured to generate a stop record, the off-load server being further configured to associate the stop record with the corresponding unique session identifier; and

the off-load server is further configured to provide the stop record to a software module that provides for performing accounting processing.

16. An apparatus, comprising:

means for creating a unique session identifier; and

means for providing the unique session identifier to a software module that provides for performing authentication.

17. The apparatus recited in Claim 16, wherein:

means for creating a unique session identifier further comprises means for appending a unique identifier associated with the access server to a local session identifier.

18. The apparatus recited in Claim 17 wherein:

the unique identifier is an IP address.

19. The apparatus recited in Claim 16, further comprising:

means for providing the unique session identifier to an off-load server.

20. The apparatus recited in Claim 16, wherein:

means for creating a unique session identifier further comprises means for creating a unique session identifier for each of a plurality of network access devices.

21. A computer program product, encoded in computer readable media, comprising:

a first set of instructions, executable on a computer system, configured to create a unique session identifier; and

4 a second set of instructions, executable on a computer system, configured to provide the
5 unique session identifier to a software module that provides for performing
6 authentication.

1 22. The computer program product of Claim 21, encoded in computer readable media, wherein:
2 the first set of instructions, executable on a computer system, is further configured to
3 append a unique identifier associated with an access server to a local session
4 identifier.

1 23. The computer program product of Claim 21, encoded in computer readable media, wherein:
2 the unique identifier is an IP address.

1 24. The computer program product of Claim 21, encoded in computer readable media, further
2 comprising:

3 a second set of instructions, executable on a computer system configured to provide the
4 unique session identifier to an off-load server.

1 25. The computer program product of Claim 21, encoded in computer readable media, wherein:
2 the first set of instructions, executable on a computer system, is further configured to
3 create a unique session identifier for each of a plurality of network access servers.